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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,347	02/01/2002	Gordon Herman Bokelman	021238-469	7641

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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/060,347

Applicant(s)

BOKELMAN ET AL.

Examiner

Carlos Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,10-12 and 21 is/are rejected.
- 7) ☒ Claim(s) 4,8,9,13,14,22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in Paper No. 6 is acknowledged.

The traversal is on the ground(s) that the search and examination of the entire application can be made without serious burden since the features of the tobacco curing barn set forth in claim 1 are also set forth in the method claims 15 and 17. This is not found persuasive because the apparatus recited in claim 1 requires a totally different search and consideration of patentability issues that are not shared by the method of curing tobacco recited claims 15 and 17. The limitations of claim 1 does not restrict the search to only tobacco curing apparatuses but also include search areas such as grain dryers, apparatus for curing ham, and/or a clean rooms, areas that are certainly not encompassed by a method of curing tobacco. Furthermore, the limitations that are directed towards the barn which are recited in the preamble of method claims 15 and 17 carry no patentable weight.

The requirement is still deemed proper and is therefore made FINAL.

The newly filed claims 21-23 are directed to the elected invention and will be examined with elected group I, claims 1-14.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: element 23 of Fig. 1B, element 22 of Fig. 2C, element 23 of Fig. 2A, and elements 36 and 34 of Fig. 3. A proposed drawing correction, corrected drawings, or amendment to

the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Danford (US 4,263,721). Danford discloses a structure for bulk tobacco curing and drying (Col. 1, Ins. 5-10). Danford's fig. 1 provides for an enclosure (10) wherein a vertically arranged air duct formed by in-line fan (34) is located at a central portion of a sidewall (18), thus meeting the claimed limitation of "at least one vertically arranged air duct positioned in a central *portion* of the enclosure " and "at least one in-line fan positioned in said at least one vertically arranged air duct." The claimed limitation "of at least one ventilating fan located in an upper portion of said enclosure" is met by Danford's ventilating fan (56). The "at least one openable and closeable opening in at least in at least one side wall of said enclosure" is met by Dansford sidewall (14) having "access opening doors or doors" (See Col. 1, Ins. 45-46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 5-7, 10-12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danford (US 4,263,721) in view of Sumner (Curing Tobacco with Heat Exchangers, online article June 2001). Danford tobacco curing enclosure functions by "providing a counter flow heat exchanger that is adapted to channel relatively warm or hot moisture laden air being exhausted from the structure and in a heat exchange relationship with inlet outside air being induced into the structure to replace the exhausted air" (Col. 2, Ins. 1-15). Danford is silent disclosing temperature or humidity sensors inside and outside the enclosure. However, Sumner teaches that tobacco curing requires controlling airflow, humidity and temperatures in the tobacco barn enclosures (Page 1). Sumner also teaches that during yellowing and leaf-drying phases humidity control is essential. Humidity control is achieved by adjusting the fresh air exchange rate of the vent system (Page 2) and that the relationship between wet-bulb and dry bulb temperatures determines the relative humidity within a barn. Thus in order to control humidity of the barn, temperature and humidity sensors located outside determining the properties of the inlet fresh air and humidity and temperature sensors inside the barn would be needed to determine necessary amount of inlet fresh air provided to the tobacco barn enclosure. At the time the invention was made it would have been obvious to one of ordinary skill in the art to have provided temperature and humidity sensors inside and outside a tobacco barn in order to control the amount of

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fresh air being introduced in Dansford's barn since Sumner teaches that control of temperature and humidity are essential in curing tobacco.

As for claims 5 and 10, it is obvious to provide sources of moisture such as steam and water in order to adjust the humidity inside the barn.

As for claim 21, the term tobacco encompasses burley tobacco.

Allowable Subject Matter

Claims 4, 8-9, 13-14 and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art does not disclose or reasonably suggest providing a programmable control system receiving input from a temperature and a humidity sensor and providing a controlling output to at least one of said at least one in-line fan, ventilating fan and at least one openable and closeable opening as recited in claims 4, 8-9, 13-14. Nor does the cited prior art disclose or reasonably suggest in-line fan, ventilating fan and at least one openable and closeable opening actuated by a programmable control system operating according to a tobacco curing cycle as recited in claim 22 or a programmable control system that monitors the outdoor humidity using one or more temperature sensors and controls ventilation in the enclosure as recited in claim 23.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References B-M in Page 1 and A-F Page 2 of PTO-892 have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

C.L
April 7, 2003